CLAIMS

1. A coke-oven repairing apparatus comprising: a traveling carriage which travels in the direction of coke oven battery with the carriage straddled on the rails placed on the top of a coke oven; a traversing carriage provided on said traveling carriage, which moves in the direction orthogonal to the direction of coke oven battery; and a working device for making repairs on the oven walls within the coke oven which is mounted on said traversing carriage,

wherein said working device includes: a guide post which stands on said traversing carriage, and is also coupled, at its lower end portion, to a supporting portion provided on the traversing carriage through a pivot shaft; a lance which ascends or descends along the guide post; and a lance oscillating means which oscillates said guide post between a forward-tilted posture and a backward-tilted posture using said pivot shaft as the fulcrum to tilt said lance inserted in a coke-oven carbonizing chamber through a charging-hole, within the carbonizing chamber.

2. The coke-oven repairing apparatus according to Claim 1 comprising, an extendable device which extends and contracts while coupling said guide post to said traversing carriage as said lance oscillating means.

3. The coke-oven repairing apparatus according to Claim 2, wherein said lance oscillating means is constituted by said extendable device and said traversing carriage.

4. The coke-oven repairing apparatus according to Claim 3, comprising a control device which interlocks said extendable device and said traversing carriage for maximizing the oscillating angle of said lance inserted in the carbonizing chamber, within a range which prevents said lance from contacting with said charging-hole.

5. The coke-oven repairing apparatus according to Claim 4, wherein, said control device controls the amount of ascent or descent of said lance such that the locus of movement of the tip end of said lance which is swung in the direction of oven length to a straight line when said lance is tilted.

6. The coke-oven repairing apparatus according to Claim 4 or 5, wherein said control device is configured to move the tip end of said lance in the vertical direction within the carbonizing chamber, by controlling the tilted angle of said lance while ascending or descending said lance tilted in the direction of oven length.

7. The coke-oven repairing apparatus according to any one of Claims 1 to 6, wherein said traveling carriage includes a traveling-carriage lift mechanism which lifts up the traveling carriage from said rails and a slewing device which revolves said traveling carriage being lifted up from said rails to a standby position parallel to the rails.

8. The coke-oven repairing apparatus according to Claim 7, wherein said traveling-carriage lift mechanism is constituted by a pedestal hung from the bottom portion of said traveling carriage and lifting cylinders coupled to the underframe of said traveling carriage and to said pedestal.

9. The coke-oven repairing apparatus according to any one of Claims 2 to 8, wherein said extendable device also serves as a derricking device for raising or folding said guide post on said traveling carriage.

10. The coke-oven repairing apparatus according to Claim 9, wherein the outline dimension of said repairing apparatus is determined such that the cross-sectional contour of said repairing apparatus orthogonal to the longitudinal direction does not interfere with the cross-sectional shape of a path opening portion which is penetrated through said coal-charging car in the direction of the travel thereof, at the state where said traveling carriage has been revolved to a standby position parallel to the rails and said

guide post is folded on said traveling carriage.

11. The coke-oven repairing apparatus according to any one of Claims 1 to 10, wherein said traveling carriage is configured to travel using rails for a coal-charging car which travels on the oven.